**Physics**

*c = 3 x 108 m/s*

**Refraction Worksheet**

1. Water has an index of refraction of 1.33. Determine the speed that light travels in water.
2. Diamond has a index of refraction of 2.42. Determine the speed that light travels in diamond
3. It is determined that light travels at a speed of 1.87 x 108 m/s in a substance. Determine the index of refraction of the substance.
4. An unknown substance has light travel through it at 2.23 x 108 m/s. Determine the index of refraction of the substance. (round to two decimal places)

1. If a substance has a higher index of refraction, does that mean it light travels faster or slower in that medium?

1. If a light ray passes from a substance with low index of refraction to another substance with high index of refraction, will the ray bend away from or closer to the normal?
2. If a light ray passes from a substance with high index of refraction to a different substance with low index of refraction, will the ray bend away from or closer to the normal?